Rejection—35 U.S.C. 112, first paragraph

Claims 1-4 were rejected under 35 U.S.C. 112, first paragraph, as lacking adequate description. This rejection is moot in view of the cancellation of Claims 1-4. The Applicants submit that it would not apply to method Claims 5-17 and 24 or to liposome Claims 18-23, in view of the recited method steps and the conventional nature of the term "NF-κB decoy". For instance, the conventional nature of this term is exemplified by Claim 203 of U.S. Patent No. 6,410,516 (attached). The specification also describes such decoys and methods for identifying such decoys, see e.g. pages 4 and 5. Moreover, the specification exemplifies such an NF-κB decoy, see e.g. page 12, starting at line 4.

Therefore, the Applicants respectfully submit that the phrase "NF-κB decoy, which inhibits the activation of at least one gene by the NF-κB transcription factor" as used in independent Claims 5 and 18 is a clear and definite term well understood by those with skill in the art, and that appropriate NF-κB decoys could be identified as described in the specification without undue experimentation. Accordingly, the Applicants respectfully submit that this rejection would not apply to the present claims.

Rejection—35 U.S.C. 112, first paragraph

Claims 1-4 were rejected under 35 U.S.C. 112, first paragraph, as lacking adequate enablement. This rejection is moot in view of the cancellation of these claims. It would not apply to the present claims, because the failures in gene therapy have been in fields unrelated to the administration of NF-κB decoys, e.g. obtaining uptake, incorporation and expression of genes to correct genetic defects. Moreover,

the Applicants have actually shown that administration of NF-κB decoys treat brain disease.

First, the Applicants respectfully submit that the gene therapy experiments generally referred to in the rejection refer to treatment of other types of diseases, with other types of genes, compositions and modes of administration that significantly differ from those of the present invention. For instance, administration of a NF-κB decoy is significantly different that obtaining uptake, incorporation and expression of a gene to correct a gene defect in a subject.

Second, unlike the unsuccessful attempts in the prior art, the Applicants have actually demonstrated the treatment of a brain disease using the claimed methods and liposomal products. As shown in the Example on pages 11-13 of the specification, the administration of an NF-κB decoy using a liposomal delivery system produced a marked inhibition of vascular narrowing to about 90% in the treated group, compared to constrictions down to 69% in the control group. These results were further confirmed histologically, where it was found that control groups had significant decreases in vascular diameter, whereas the group treated with the NF-κB decoy was almost similar to normal blood vessels.

Third, the Applicants are not claiming the treatment of any disease using the NF-κB decoys of the present invention, but, specifically, brain diseases. The data of record, clearly show that treatment of a brain disease using the claimed methods and products. In view of these data, especially data showing that vascular narrowing or constriction is significantly decreased by the claimed methods, the Applicants respectfully submit that one with skill in the medical or biological arts would be able to select appropriate brain diseases and appropriate forms and sites of administration for treatment of a subject without undue experimentation. Moreover, these data are

even more persuasive with respect to methods of treating the specific types of brain diseases described by Claims 6-8.

With respect to liposomal product Claims 18-23, the Applicants submit that the data of record show that such liposomal products are suitable at least for treating vascular narrowing associated with subarachnoid hemorrhage and thus there is no reason to question the enablement of these products.

Rejection—35 U.S.C. 112, second paragraph

Claims 1-4 and 2-4 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. These rejections are moot in view of the cancellation of these claims.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon
Attorney of Record
Registration No. 24,618

Thomas M. Cunningham
Registration No. 45,394

22850

(703) 413-3000
NFO:TMC:krs
I:\ATTY\TMC\00181093-AMEND.DOC

DOCKET NO.: 0018-1093-0 PCT
SERIAL NO.: 09/446,913

MARKED-UP COPY OF AMENDMENT

Cancel Claims 1-4.

Add new claims 5-24:

--5. - 24. (New)--